

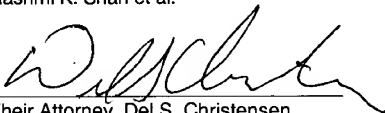
combustion without forming a flame." But the apparatus of '872 would not necessarily lack a flame. Further, on page 5, line 55, and on page 6, line 4, "autoignition" of the burner is referred to, confirming that a flame is envisioned. The present specification, on page 6, lines 1-8, other requirements for maintaining a flameless combustion are discussed. Preheating reactants is needed to maintain flameless combustion, but rapid mixing so as to keep any flame blown off the nozzle is also required. Recirculation or low-velocity regions need to be avoided. Small increments of fuel are added, and a preheat temperature of 850°C to 1400°C is used in the present invention. Patent '872 refers to preheaters "known in the art and commercially available" (page 5, line 45). Such preheaters would normally not preheat combustion air to the temperatures required for flameless combustion. Because flameless combustion is not taught in patent '872, the Examiner appears to be relying on inherent disclosure of the flameless nature of the present invention. But to inherently disclose an element, the element must necessarily be present. The flameless combustion does not necessarily occur with the apparatus of patent '872. Thus, elements of the present invention that require flameless combustion are not taught or suggested by '872. Thus, a rejection of the present claims under either 35 U.S.C. §102 or 35 U.S.C. §103 is improper and the present rejection is respectfully traversed.

Each of the rejections having been traversed, allowance of the remaining claims is respectfully requested. If the Examiner would like to discuss this application, it is respectfully requested that the undersigned be contacted at (713) 241-3997.

Respectfully submitted,

Rashmi K. Shah et al.

By:



Their Attorney, Del S. Christensen
Registration No. 33,482
(713) 241-3997

P. O. Box 2463
Houston, TX 77252-2463